

METHOD AND SYSTEM FOR A MODULAR TRANSMISSION CONTROL
PROTOCOL (TCP) FREQUENT-HANDOFF DESIGN IN A STREAMS BASED
TRANSMISSION CONTROL PROTOCOL INTERNET PROTOCOL (TCP/IP)
IMPLEMENTATION

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ABSTRACT OF THE INVENTION

A method and system for handing-off TCP states in a
communication network. Specifically, the present invention
10 allows for handing-off TCP states between nodes in an
associated network that is optimized for frequent handoff of
TCP states. The handoff occurs between dynamically loadable
modules that wrap around the TCP/IP stack located at a
front-end server and a selected back-end server. A handoff
15 protocol implemented by the loadable modules works within
the kernel level of the existing TCP/IP code. As such, no
changes to the existing TCP/IP code is necessary. The
loadable modules at the front-end are able to select a back-
end server depending on the content of the HTTP request,
20 coordinate handing off TCP states, and forward packets to
the back-end server. Loadable modules at the selected back-
end modify response packets to reflect the proper TCP state
of the front-end server.

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